

Amendments to the Specification:

Please replace the paragraph beginning at page 15, line 22 and ending at page 15, line 28 with the following amended paragraph:

At block 1106, weld bead modeling function 114 determines if, more than one edge was collected and copied. If only one edge was collected and copied, weld bead modeling function 114 initializes the single edge copy as the path, block 1108. If more than one edge was collected and copied, weld bead modeling function 114 unites the copied edges to form a wire body, using a shape manager API and the resulting disjointed pieces of the wire body are collected as paths P1, P2, ... Pn, and so forth, block 1110.

Please replace the paragraph beginning at page 16, line 13 and ending at page 16, line 21 with the following amended paragraph:

In various embodiments, ~~the factors employed to determine whether~~ a located face is invalid ~~may include if~~:

- the face belongs to FS1 or FS2[[. T]] (the bead is generated along such faces and they do not contribute to end trimming)[[.]]
- the face geometry is not supported (e.g. in one embodiment, a spline face),
- the normal of the planar faces at the start and end points are parallel to the tangents of the path at the respective points, or
- the face is a duplicate.